What is claimed is:

1. A fuel injector (5), particularly fuel injector (5) projecting directly into a combustion chamber (3) of an internal combustion engine, having one fuel inlet (7), having one movable valve-closure member (28), having one fixed valve seat (27) with which the valve-closure member (28) cooperates for opening and closing the valve, and having one fuel outlet formed in a downstream valve end (8), the fuel outlet being formed by at least one discharge orifice (32, 90) arranged downstream of the valve seat (27), wherein component (26, 67, 72) having the at least one discharge orifice (32, 90) has, at least in outlet area (55) of the discharge orifice (32, 90), a coating around the discharge orifice.

2. The fuel injector as recited in Claim 1, wherein the fuel injector projects into the combustion chamber (3) of an internal combustion engine having externally supplied ignition.

3. The fuel injector as recited in Claim 1, wherein the fuel injector projects into the combustion chamber (3) of an auto-ignition internal combustion engine.

4. The fuel injector as recited in one of the foregoing claims, wherein the coating is provided in a ring shape about the discharge orifice (32, 90) of the downstream surface (54, 96) of the component (26, 67, 72).

5. The fuel injector as recited in one of Claims 1 through 3, wherein the coating is provided over the entire surface on the downstream surface (54, 96) of the component (26, 67, 72).

6. The fuel injector as recited in one of Claims 4 or 5, wherein in addition to coating the surface (54, 96) of

the component (26, 67, 72), the coating also extends into the discharge orifice (32, 90).

7. The fuel injector as recited in one of Claims 1 through 6, wherein the coating is in the form of a catalytically active layer of Co or Ni, or cobalt or nickel oxides, or oxides of Co- or Ni-alloys, or Ru, or Rh, or Pd, or Os, or Ir, or Pt, or alloys of these metals among themselves and/or with other metals.

8. The fuel injector as recited in Claim 7, wherein the layer is able to be produced by electrochemical or external-currentless metal deposition.

9. The fuel injector as recited in one of Claims 1 through 6, wherein the coating is implemented as a metal-containing or metal-free carbon layer.

10. The fuel injector as recited in one of Claims 1 through 6, wherein the coating is implemented as a fluorine-containing layer.

11. The fuel injector as recited in Claim 10, wherein the fluorine-containing layer is a layer of fluorosilicate (FAS).

12. The fuel injector as recited in one of Claims 1 through 6, wherein the coating is implemented as a nitrite layer (TiN, CrN).

13. The fuel injector as recited in one of Claims 1 through 6, wherein the coating is implemented as a tantalum oxide layer or titanium oxide layer.

14. The fuel injector as recited in one of the foregoing claims, wherein the component having the at least one

discharge orifice (32, 90) is a valve-seat element (26, 72) also having the valve seat (27).

15. The fuel injector as recited in Claim 14, wherein the valve-seat element (26) has an upstream end face on which the valve-seat surface (27) is formed, and has a downstream end face (54), opposite the upstream end face, on which the coating is applied.

ADD a17